

## **METHOD AND APPARATUS FOR DUAL PASS ADAPTIVE TESSELLATION**

### **ABSTRACT**

A method and apparatus for dual pass adaptive tessellation includes a vertex grouper tessellator operably coupled to receive primitive information and an index list and a shader processing unit coupled to the vertex grouper tessellator. During a first pass, the shader processing unit receives primitive indices generated from the primitive information and an auto-index value for each of the plurality of primitive indices. The method and apparatus further includes a plurality of vertex shader input staging registers operably coupled to the shader sequence, wherein the plurality of vertex shader input staging registers are coupled to a plurality of vertex shaders such that in response to a shader sequence output, the vertex shaders generate tessellation factors. The tessellation factors are provided to the vertex grouper tessellator such that the vertex grouper tessellator generates a per-process vector output, a per primitive output and a per packet output during a second pass.